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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,993	08/26/2003	Mukesh K. Puri	03-0290	3084

24319 7590 03/03/2004

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EXAMINER

LUU, PHO M

ART UNIT PAPER NUMBER

2824

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,993

Applicant(s)

PURI ET AL.

Examiner

Pho M Luu

Art Unit

2824

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Search History.

DETAILED ACTION

Drawings

1. The drawings are objected to because of the hand drawing. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Aipperspach et al. (US. 6,205,063).

Regarding claim 1, Aipperspach et al (Fig. 1) discloses a BISR scheme comprising a fuse controller (104), a plurality of memories (memory array 102 is arranged in memory array portion 110, see column 2, lines 36-39) connected to the fuse controller, a plurality of fuse blocks (106, also see column 2, lines 52-53) connected to the fuse controller the BRIS scheme configured such that the memories share the fuse blocks (see column 2, line 60 through column 3, line 4).

With respect to claim 2, Aipperspach et al (Fig. 1) disclosed that the memories (memory array 102 coupled to fuse controller 104) are serially connected to the fuse controller.

With respect to claim 3, Aipperspach et al (Fig. 1) disclosed that the fuse blocks (fuse circuit 106 coupled to fuse controller 104) are serially connected to the fuse controller.

With respect to claim 4, Aipperspach et al (Fig. 1) disclosed that the memories (102) are serial connected to the fuse controller (104) and the fuse blocks (106) are serially connected to the fuse controller.

With respect to claim 5, Aipperspach et al (Fig. 1) disclosed that there are more memories than fuse blocks (memory array 102 contain 48 memory array portion 110, see column 2, lines 36-39).

With respect to claim 6, Aipperspach et al (Fig. 1) disclosed that the fuse controller (104 determines which of the plurality of memory array 110 contain based on information supply by the fuse circuit 106) is configured to program memory address into the fuse blocks (see column 2, line 64 though column 3, line 4).

With respect to claim 7, Aipperspach et al (Fig. 1) disclosed that the fuse controller is configured to program memory address and repair solution into the fuse blocks (see column 3, lines 5-23).

Regarding claim 8, Aipperspach et al (Fig. 1) disclosed a method of implementing a BISR scheme comprising providing a fuse controller (104), a plurality of memories (memory array 102 is arranged in memory array portion 110, see column 2,

lines 36-39) connected to the fuse controller, a plurality of fuse blocks (106, also see column 2, lines 52-53) connected to the fuse controller and having the memories share the fuse blocks (see column 2, line 60 through column 3, line 4).

With respected to claim 10-11, Aipperspach et al (Fig. 1) disclosed that burning the fuse blocks to program a repair solution and memory address into the fuse controller (see column 2, lines 55-63).

With respected to claim 12, Aipperspach et al (Fig. 1) disclosed that loading fuse values into the fuse controller (see column 2, line 64 thought column 3, line 4).

Allowable Subject Matter

4. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 9, the prior art of record do not disclose or suggest the performing a wafer sort.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Kim. (US. 5,912,841) disclosed the repair fuse circuit using flash memory cell by performing the initialization of the cross-coupled latch circuit a high voltage level.

Yamada. (US. 5,892,718) disclosed the programmable circuit included a fuse control circuit.

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Pho M. Luu whose telephone number is 571.272.1876.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Richard Elms, can be reached on 571.272.1869. The official fax number for the organization where this application or proceeding is assigned is 703.872.9306 for all official communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0956.

PML
20 February 2004



RICHARD ELMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800